

Case Report

CARCINOSARCOMA OF THE GALL BLADDER - A CASE REPORT AND LITERATURE REVIEW

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ABSTRACT

Carcinosarcoma of the gall bladder is an uncommon neoplasm comprises less than one percent of the gall bladder cancers, and characterized by the presence of variable proportion of carcinomatous and sarcomatous element. We report herein a case of 65 year female having cholelithiasis treated by simple cholecystectomy. On histological examination reported as Carcinosarcoma, on immunohistochemistry the carcinomatous areas were positive for cytokeratin and sarcomatous areas were positive for vimentin.

Key Words: *Carcinosarcoma, Cholelithiasis, Vimentin, Cytokeratin*

INTRODUCTION

Carcinosarcoma of the gall bladder is a rare neoplasm, the diagnosis require the presence of both malignant epithelial and mesenchymal component (Born *et al.*, 1984). The disorders are sometimes called malignant mixed mesodermal tumors and are reported to occur rarely in the uterus, liver, kidney and ovary (Lopez *et al.*, 1985). The prognosis of patient with Carcinosarcoma of the Gall bladder has been reported to be poor (Huget *et al.*, 2005).

CASES

A 65 year female was admitted in the department of surgery in the Mahatma Gandhi Medical College and Hospital with right upper quadrant abdominal pain since 2 months. She had history of vomiting on and off from last one month. Clinical examination disclosed tenderness in the right upper quadrant space. Hematological and biochemical parameters were within normal limits. Ultrasonography revealed Cholelithiasis with the presence of 12-15 stones in the Gall Bladder. Patient underwent Cholecystectomy. The specimen was sent to the department of Pathology. The recieved gall bladder was already cut, stones were removed, was measuring 11X4.5X4 cm in size. Outer surface was grey white with areas of hemorrhage. Almost whole of the lumen of the Gall Bladder was occupied by Polypoid mass measuring 8X3.5X3.5 cms in size, solid, from grey white with hemorrhagic areas (Fig. 1).



Figure 1: The resected specimen of gall bladder showing polypoid mass

Case Report

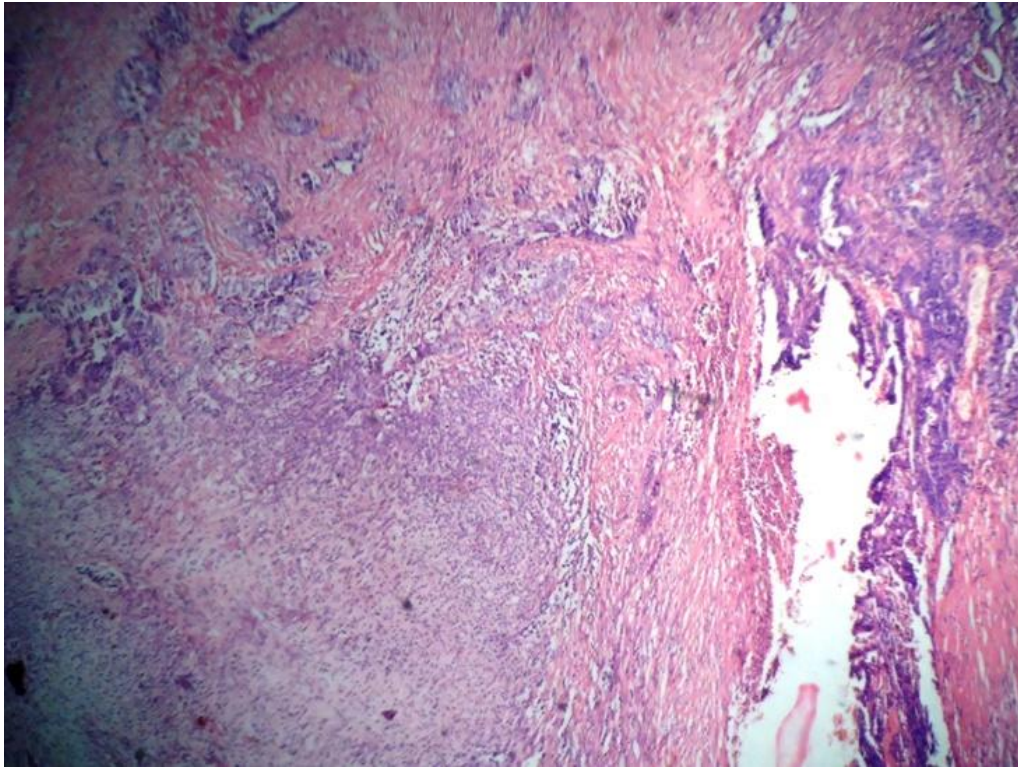


Figure 2: Histological examination of the resected specimen).Microscopic examination showed the tumor was composed of adenocarcinoma and spindle cell sarcomatoid component (HE X 100)

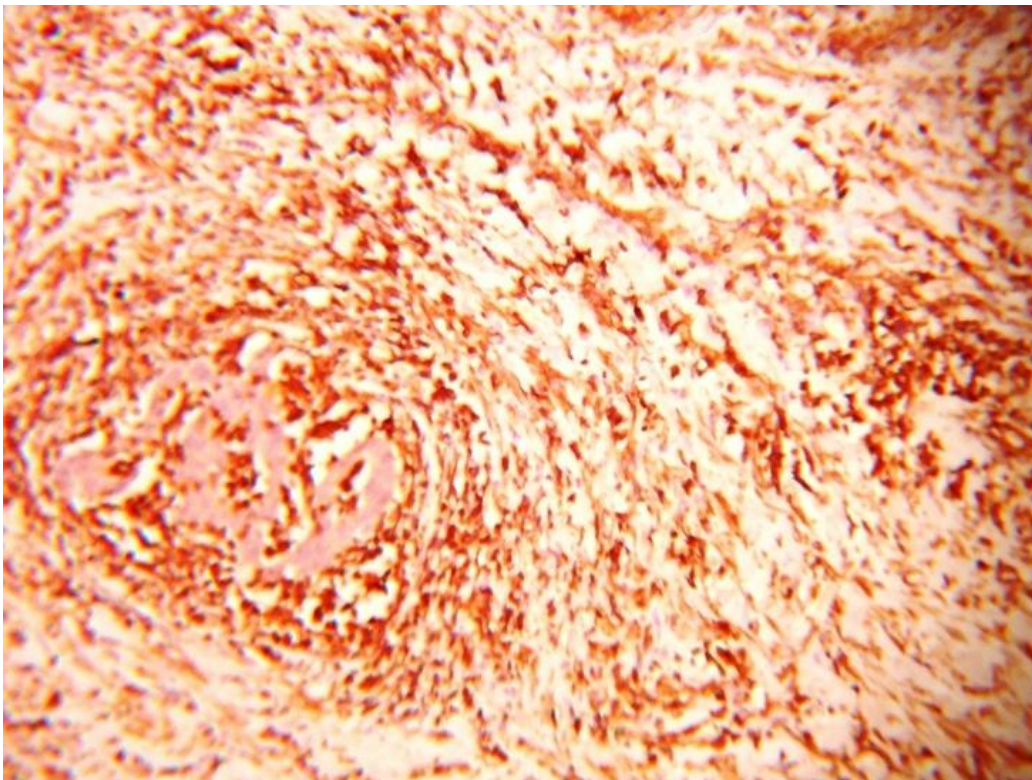


Figure 3: Immunohistochemical staining sarcoma cells were positive for vimentin (x400)

Case Report



Figure 4: Immunohistochemical staining Adenocarcinoma was positive for cytokeratin (x400)

Microscopic Examination showed biphasic pattern and composed of two elements. One was sarcomatous and the other was Adenocarcinoma. The sarcomatous areas showed fascicles of spindle shaped cells with focal carcinomatous areas in the form of scattered glands with considerable nuclear pleomorphism (Fig. 2). Heterologous sarcomatous elements were not seen. On immunohistochemistry the sarcomatous areas were positive for vimentin (Fig. 3). The carcinomatous areas were positive for cytokeratin (Fig. 4).

DISCUSSION

The term carcinosarcoma was first used as descriptive term by Virchow in 1864. The first case of carcinosarcoma in the gall bladder reported by Landsteiner in 1907 was found in museum specimen (Landsteiner *et al.*, 1907). To the best of our knowledge forty cases of carcinosarcoma of gall bladder has been reported by Kabayashi *et al.*, (2009).

Carcinosarcoma are rare and constitute less than 1% of gall bladder cancer. It is characterized by malignancy of both epithelial and mesenchymal component of the same tissue. Its diagnosis requires presence of and intermingling of both histological components (Krishnamurthy *et al.*, 2011). Symptoms of carcinosarcoma of gall bladder are nonspecific (Park *et al.*, 2012). Most patient with carcinosarcoma of gall bladder are females in their sixth or seventh decade and present with abdominal pain and right upper quadrant mass, with or without jaundice (Shenber *et al.*, 2002 and Agarwal *et al.*, 2009). Carcinosarcoma of the gall bladder are associated with cholelithiasis. It is being seen that (Roth *et al.*, 1972) association with cholelithiasis in 83% of cases while Vonkuster *et al.*, (1982) reported in 82% of cases of carcinosarcoma. Present case was also associated with cholelithiasis. These tumors are large and polypoid and often fill the gall bladder as in our case. Immunostaining is helpful in making diagnosis. Adenocarcinoma component is positive for cytokeratin and mesenchymalsarcomatous component positive for Vimentin.

Histogenesis of carcinosarcoma is unclear, whether it is due to concurrent transformation of epithelial and mesenchymal cell line in the same organ or that the spindle cell component represents sarcomatous metaplasia in a poorly differentiated carcinoma is debatable.

Case Report

In summary we report a case of carcinosarcoma of gall bladder. The case is being reported because of its rarity.

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